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REMARKS

Claims 1, 7 and 11 are amended. Claims 1-15, as amended, remain in the application. No new matter is added by the amendments to the claims.

The Rejections:

In the Office Action dated January 5, 2007, the Examiner rejected Claims 1-15 under 35 U.S.C. 103(a) as being unpatentable over De Angelis (5,566,786) in view of LaNieve et al. (5,437,899).

The Examiner stated that in Claims 1, 3, 4 and 6 - 9, De Angelis discloses an elongated load-bearing support device (1) with load bearing strands (4), each having a plurality of fibers (5) of a base material in a first phase (aramid fibers (Col. 2, Line 38)) and the strands being surrounded by a sheath (7), the reinforcing material of De Angelis is of a second phase, yet it is externally applied to the base material as "... an impregnating medium, for example polyurethane solution, for the protection of the fibers 5" (Col.3, Line 57) whereby the bending fatigue strength of the strands is increased. The Examiner directed attention to LaNieve et al. as teaching, "... polymers have been mixed with particulate matter and made into fibers..." (Col. 1, Line 54), whereby the particulate matter of their invention being "...an elemental metal or metal alloy, or may be nonmetallic..." (Col. 6, Line 14), whereby their polymer is an aromatic polyamide known as aramid. According to the Examiner, LaNieve teaches further that such addition of particulate matter will enhance the flexural strength of the fiber, while reducing its tensile strength (modulus of elasticity), whereby their inventive feature is the minimization of such consequential reduction in loss of tensile strength, and it would have been obvious to one of ordinary skill in the art to modify the base material of De Angelis with the teaching of LaNieve, in order to gain the benefits of the structural and performance features of LaNieve.

Regarding Claim 2, the Examiner stated that De Angelis discloses his strands having a plurality of fibers (5) formed into a cable (4 and, in total, 1).

Regarding Claims 5 and 10, the Examiner stated that as noted above LaNieve teaches a reinforcing material as particulate matter, such as platelets and needles (Col. 6, Line 35).

Regarding Claims 11-15, the Examiner stated that the devices of Claims 1-10 would necessarily have to be formed in order to function, and it would have been obvious to perform

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all the method steps of Claims 11-15 when producing the device of De Angelis as modified by LaNieve above, in a usual and expected fashion, in as much as the method claims recite no limiting steps beyond producing each of the components.

Regarding Claim 11, the Examiner stated that De Angelis, discloses an elongated load-bearing support device (1) with fibers (5) from a base material in a first phase (aramid fibers) and a reinforcing material in a second phase ("... an impregnating medium, ...polyurethane solution), with the load-bearing strands (4) thereof being surrounded by a sheath (7), and that LaNieve teaches further "... polymers have been mixed with particulate matter and made into fibers...".

Regarding Claim 12, the Examiner stated that De Angelis and LaNieve disclose a base material selected from aramid.

Regarding Claim 13, the Examiner stated that De Angelis discloses a reinforcing means by impregnation with a polyurethane solution to increase the bending fatigue strength of the base material, whereas LaNieve teaches a reinforcing material as "...an elemental metal or metal alloy..." which is used to fill their base material.

Regarding Claim 14, the Examiner stated that LaNieve teaches further that addition of particulate matter will enhance the flexural strength (modulus of elasticity in a radial direction).

Regarding Claim 15, the Examiner stated that LaNieve teaches a reinforcing material as particulate matter, such as platelets and needles.

The Response:

Applicant amended independent Claims 1, 7 and 11 to recite that the reinforcing material increases a modulus of elasticity of the strands. See Page 7, Lines 22-32.

According to the Examiner, LaNieve teaches "further that such addition of particulate matter will enhance the flexural strength of the fiber, while reducing its tensile strength (modulus of elasticity). This observation by the Examiner is confirmed in LaNieve Col. 7, Lines 11-16. Thus, the combination suggested by the Examiner produces the opposite result regarding the modulus of elasticity as that recited in Applicant's amended claims.

The Examiner stated that the prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. The Examiner cited Sandt (5,576,081), Causa et al

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(5,576,104), and Oleson et al (4,956,039) for an elongated structural element filled with a polymer binder in liquid form with a dispersion of fiber reinforcement material; elastomers having high modulus rigid rod liquid crystalline fibers as fiber reinforcement for use in tires; and a cable-like composite body comprising a thermoplastic sleeve that "...is preferably filled with reinforcement elements having a high modulus of elasticity..." as well as a core string comprising a thermoplastic material with filaments of "...preferably E-.. S-glass...", respectively. Applicant reviewed these references and found them to be no more pertinent than the prior art relied upon by the Examiner in the rejections.

In view of the amendments to the claims and the above arguments, Applicant believes that the claims of record now define patentable subject matter over the art of record. Accordingly, an early Notice of Allowance is respectfully requested.